Neurosurgeon rating websites

Patient satisfaction ratings are increasingly used for hospital rankings, referral base and physician reimbursement. As such, online physician rating websites (PRWs) are quickly becoming a topic of interest.

The objective of Hopkins et al., was to analyze and quantify the effects of physician reported industry payments on the patient experience and patient satisfaction as defined by Physician Rating Websites (PRW).

They analyzed physician-reported industry payments received by neurosurgeons over four consecutive years as defined by the Physician Payments Sunshine Act (PPSA). All board-certified neurosurgeons on three widely used PRWs were further identified. Data was collected on average rating, number of ratings and composite ratings. Demographic, training-related and practice-related data were also collected. Each physician was identified and matched to their individually reported payments from the PPSA database.

Receiving higher amounts of industrial payments had no correlation to average PRW ratings, however was associated with receiving higher composite PRW ratings ($p = 0.0389$). Higher composite ratings ($p = 0.0389$), decreasing age ($p = 0.005$), being male (OR 1.7960, $p = 0.005$), completing a fellowship (OR 1.3310, $p = 0.0085$), having a more complete profile (OR 1.1121, $p = 0.0057$) and speaking more languages (OR 1.1253, $p = 0.03802$) all were correlated with receiving more total monetary payments. Training at a top 25 residency program was predictive of being in the bottom quartile of total monetary payments received (OR 1.676, $p = 0.0002$).

Patient experience as defined by PRW ratings are likely not strongly influenced by industry related monetary payments, however some relationship may exist. Further study is needed to determine the true relationship between industry related monetary payments and the patient experience [1)].

Cloney et al., used a key term search to identify board-certified neurosurgeons on 3 widely used PRWs: RateMD.com, Healthgrades.com, and Vitals.com. Data were collected on average rating and number of ratings. Demographic, training-related and practice-related data, as well as location of practice, and place of training were also collected.

Data was non-normally distributed ($P < .001$ for all 3). Having fewer reviews was associated with higher variance in ratings between PRWs for a given surgeon (odds ratio 0.99, $P = .001$). All surgeons below the 25th percentile with respect to the number of reviews that had been written about them were eliminated. Of the remaining surgeons ($n = 3054$), the median composite score was 4.11 out of 5, interquartile range (3.69, 4.44). Surgeons had higher median modified composite scores if they were fellowship-trained ($P = .0001$) or graduated from a top 25 medical school ($P = .0117$), but not if they graduated from a top 25 residency ($P = .1056$). Surgeons located in major cities had higher median composite scores ($P = .0025$).

Online ratings for neurosurgeons must be evaluated in context. Median ratings are generally high, but variable between websites. Median scores also vary among regions and practice settings. Higher scores were associated with ranking of medical school, recent graduation, and fellowship training completion [2)].

1)
Hopkins B, Yamaguchi JT, Cloney MB, Shlobin NA, Dahdaleh NS. Effects of the physician payments sunshine act on the patient experience and perception of care amongst neurosurgeons: A comparative study of online PRW ratings and industry payments. Clin Neurol Neurosurg. 2018 Dec 11;176:127-132. doi: 10.1016/j.clineuro.2018.12.008. [Epub ahead of print] PubMed PMID: 30557766.
2)
Cloney M, Hopkins B, Shlobin N, Dahdaleh NS. Online Ratings of Neurosurgeons: An Examination of Web Data and its Implications. Neurosurgery. 2018 Apr 3. doi: 10.1093/neuros/nyy064. [Epub ahead of print] PubMed PMID: 29618127.